

Work Order ID 48590E



Page 1

Friday, June 26, 2009 11:51:25 AM

Item ID:	D3822-7KIV	Accept		Setup	Start	
Revision ID:	B C DE				Stop	
Item Name:	Vertical Tunnel, Lower-Ivory					
Start Date:	7/15/2009	Start Qty:	3.00		Cust Item ID:	
Required Date:	8/3/2009	Req'd Qty:	3.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr


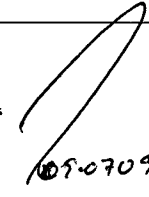
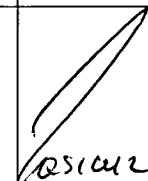
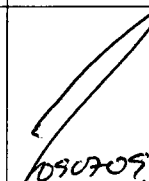
100		0.00							
	Thermoform	Memo	0.00	BB	09/07/07 X3				
	Thermoforming Machine	Machine Set-Up							

110		0.00							
	Thermoform	Memo	0.00	BB	09/07/07 (X3)				
	Thermoforming Machine	1-Cut Sheet to required Blank size							

120		0.00							
	Thermoform	Memo	0.00		BB 09/07/07 X3				
	Thermoforming Machine	Thermoform as per Dwg and Folio #FTA029 using tool DT9396							
		Dwg Rev: <u>5</u>							
		Folio Rev: <u>5</u>							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3822-7KIV PAR #: N/A Fault Category: THRU NCR: (Yes) No DQA: 10 Date: 09-07-10
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 10 Date: 09-08-17

NCR: <u>48590E</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/07/09	150	TRIMMING ERROR: Trimmed too thin on 1/4 bottom edge flange. RC: Human error.		Scrap: No replace	BB 09/07/09			

NOTE: Date & initial all entries

Work Order ID 48590E

Friday, June 26, 2009 11:51:25 AM

Page 2

Item ID: D3822-7KIV

Accept

Revision ID:

Item Name: Vertical Tunnel, Lower-Ivory

Start Date: 7/15/2009 Start Qty: 3.00

Required Date: 8/3/2009 Req'd Qty: 3.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev. Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

BB 09/07/09 (x3)

140

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

Wu. 09/07/09 (x3)

150

0.00



Thermoform

Memo

0.00

Thermoforming Machine

1-Trim to finished dimensions as per Dwg







BB 09/07/09 X



(P.O.)




Work Order ID 48590E

Friday, June 26, 2009 11:51:25 AM

Page 3

Item ID: D3822-7KIV Accept  Setup Start 
Revision ID: BC  Stop 
Item Name: Vertical Tunnel, Lower-Ivory
Start Date: 7/15/2009 Start Qty: 3.00  Cust Item ID:
Required Date: 8/3/2009 Req'd Qty: 3.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00	BB	09/07/09					
170  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	⇒	509/02/09	(12)				
180  Packaging Packaging	Identify as per dwg & Stock Location: _____ Memo	0.00 0.00	9/7/9	(24)	SQ				

Picklist Print

Page 1

Friday, June 26, 2009 11:51:24 AM

Work Order ID: 48590E



Parent Item: D3822-7KIVRev *24*



Parent Item Name: Vertical Tunnel, Lower-Ivory

Start Date: 7/15/2009

Required Date: 8/3/2009

Comments: Est Rev:C Add Colour Code 09-06-02 DL

Start Qty: 3.00

Required Qty: 3.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MKYD6185S.080-P3-62015		Purchased	No			100	sf	0.0000	5.2826			
6185 KYDEX .080"												

BB M109703

Date: Monday, 15/06/2009 4:19:55 PM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: VERTICAL TUNNEL LOWER, IVORY
Job Number	: 48590E		
Estimate Number	: 13603		
P.O. Number	:	Part Number	: D38227KIV
This Issue	: 15/06/2009	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: D3822-7
First Issue	: / /	Project Number	:
Previous Run	: 47672E	Drawing Revision	: <i>BB</i>
	Type : THERMOFORMING	Material	: MKYD6185S080P362015
Written By	:	Due Date	: 22/06/2009
Checked & Approved By	: <i>JV 09.06.15</i>	Qty:	: <i>3</i> Um: Each
Comment	: Est. Rev. A New Issue 08.09.25 DL Rev B Dwg. Update. 09/02/09 DL verified by:DD Est. Rev C Add Colour Code 09/06/02 DL		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	MKYD6185S080P362015	6185 KYDEX .080"
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Comment: Qty.: 1.7600 sf(s)/Unit Total: 8.8000 sf(s)
 6185 Kydex .080" Ivory

M109703

2.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
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**Comment:** HAND FINISHING THERMOFORMING

1) Machine set up

*BB**09/07/07*

3.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
-----	----------------	------------------------------

**Comment:** HAND FINISHING THERMOFORMING

1) Cut sheet to required blank size

*BB**09/07/07**(x3)*

4.0	THERMOFORMING	THERMOFORMING MACHINE
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**Comment:** THERMOFORMING MACHINE

Thermoform as per Dwg. D3822-7 and folio FTA 029) using tool DT 9396

Dwg. Rev. *S*Folio Rev. *B**BB 09/07/07 (x3)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: VERTICAL TUNNEL LOWER, IVORY

Job Number: 48590E

Part Number: D38227KIV

Job Number:



Seq. #:	Machine Or Operation:	Description :
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5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Visually inspect for proper formation of each part

BB 09/07/07 X3

6.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

BB 09/07/08 X3

7.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
-----	----------------	------------------------------



Comment: HAND FINISHING THERMOFORMING

1) Trim to Finished Dimensions

BB 09/07/09 X2

8.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Check dimensions to ensure conformity to drawing tolerances.

BB 09/07/09 X2

9.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

BB 09/07/09 X2

10.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

11.0	QC21	FINAL INSPECTION/W/O RELEASE
------	------	------------------------------



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 48590E
Description: Vertical Tunnel Lower Wing		Part Number: D3822-7K10
Inspection Dwg: D3822-7 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than _____"	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: JB

Date: 09/07/09

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.20-.15		18.4	✓			
.060		.071	✓			

Measured by: JB

Date: 09/07/09

Audited by: C

Date: 09/07/09

Prototype Approval: 11/2

Date: 11/2

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/DL	

8 7 6 5 4 3 2 1

D

C

B

A

MIN THICKNESS 0.040 MIN THICKNESS 0.040

6

0.20
0.15
2.0
0.4 REF
0.3 REF
0.3 REF

5.9
H
17.00 MIN
TEXTURED SIDE
H B1-6

SECTION H-H B3-6

D3822-7 VERTICAL TUNNEL, LOWER
(BELL 206 A/B)

RELEASED
09/05/22

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) WITH VIBRATING STYLUS
- 7) WEIGHT: 0.36 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9396 PER DART QSI 022
- 9) MINIMUM THICKNESS: 0.060" UNLESS OTHERWISE NOTED



PART NUMBER	DESCRIPTION
D3822-7KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3822-7KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

DESIGN	BY	DART AEROSPACE LTD	
DRAWN	BY	HAWKESBURY, ONTARIO, CANADA	
CHECKED	BY	DRAWING NO.	REV. C
MFG. APPR.	BY	D3822	SHEET 6 OF 6
APPROVED	BY	TITLE	SCALE
DE APPR.	BY	VERTICAL TUNNEL (BELL 206 A/B)	NTS
DATE	09.05.05	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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NO 185901

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

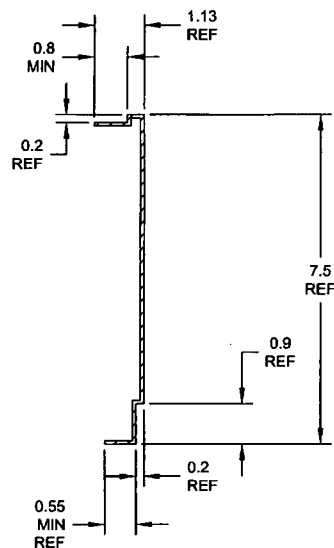
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

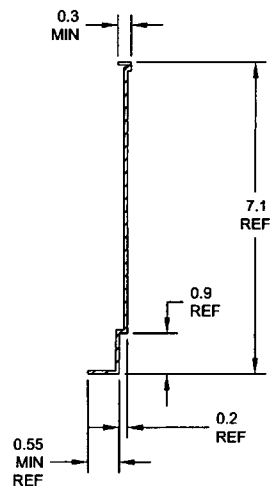
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NOTE: Date & initial all entries

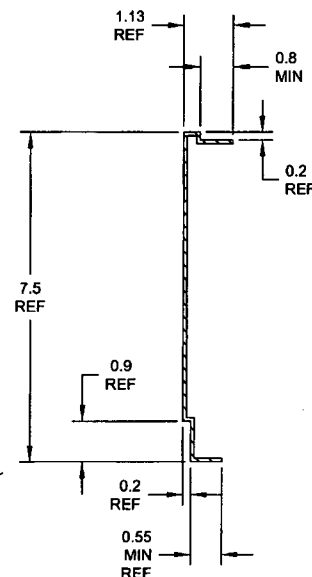
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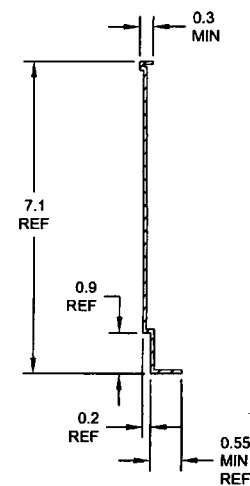
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

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09/05/05

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CHECKED		DRAWING NO. D3822	REV. C
MFG. APPR.		TITLE	SHEET 3 OF 6
APPROVED		VERTICAL TUNNEL (BELL 206 A/B)	SCALE
DE APPR.			NTS
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8 7 6 5 4 3 2 1

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries